

Hollow cathode lamps & Standards

High quality hollow cathode lamps with reference wavelength conform referred Element. Preheat time: ≤ 3 0 min with a good Radiation stability and optima lamp life. It is important to establish the lamp current - sensitivity curve to able selecting the optimum operating current. The working lamp current should be in the range of 1/3- 2/3 of the maximum current shown on the lamp.

Ordering Information:

Article no. Element	Article No. Standard	Sym	Element	Article no. Element	Article No. Standard	Sym	Element
0.100.101	0.100.201	Al	Aluminium	0.100.132	0.100.232	Hg	Mercury
0.100.102	0.100.202	Sb	Antimony	0.100.133	0.100.233	Mo	Molybdenum
0.100.103	0.100.203	As	Arsenic	0.100.134	0.100.234	Nd	Neodymium
0.100.104	0.100.204	Ba	Barium	0.100.135	0.100.235	Ni	Nickel
0.100.105	0.100.205	Be	Beryllium	0.100.136	0.100.236	Nb	Niobium
0.100.106	0.100.206	Bi	Bismuth	0.100.137	0.100.237	Os	*Osmium
0.100.107	0.100.207	B	Boron	0.100.138	0.100.238	Pd	Palladium
0.100.108	0.100.208	Cd	Cadmium	0.100.139	0.100.239	Pt	Platinum
0.100.109	0.100.209	Cs	*Cesium	0.100.140	0.100.240	K	Potassium
0.100.110	0.100.210	Ca	Calcium	0.100.141	0.100.241	Re	Rhodium
0.100.111	0.100.211	Ce	Cerium	0.100.142	0.100.242	Rh	Rhodium
0.100.112	0.100.212	Cr	Chromium	0.100.143	0.100.243	Rb	*Rubidium
0.100.113	0.100.213	Co	Cobalt	0.100.144	0.100.244	Sm	Samarium
0.100.114	0.100.214	Cu	Copper	0.100.145	0.100.245	Sc	*Scandium
0.100.115	0.100.215	Er	*Erbium	0.100.146	0.100.246	Se	Selenium
0.100.116	0.100.216	Eu	*Europium	0.100.147	0.100.247	Si	Silicon
0.100.117	0.100.217	Gd	Gadolinium	0.100.148	0.100.248	Ag	Silver
0.100.118	0.100.218	Ga	Gallium	0.100.149	0.100.249	Na	Sodium
0.100.119	0.100.219	Ge	Germanium	0.100.150	0.100.250	Sr	Strontium
0.100.120	0.100.220	Au	Gold	0.100.151	0.100.251	Ta	Tantalum
0.100.121	0.100.221	Hf	*Hafnium	0.100.152	0.100.252	Tb	*Terbium
0.100.122	0.100.222	Ho	*Holmium	0.100.153	0.100.253	Te	Tellurium
0.100.123	0.100.223	In	Indium	0.100.154	0.100.254	Tl	Thallium
0.100.124	0.100.224	Ir	Iridium	0.100.155	0.100.255	Sn	Tin
0.100.125	0.100.225	Fe	Iron	0.100.156	0.100.256	Ti	Titanium
0.100.126	0.100.226	La	Lanthanum	0.100.157	0.100.257	W	Tungsten
0.100.127	0.100.227	Pb	Lead	0.100.158	0.100.258	V	Vanadium
0.100.128	0.100.228	Li	Lithium	0.100.159	0.100.259	Zn	Zinc
0.100.129	0.100.229	Lu	*Lutecium	0.100.160	0.100.260	Zr	Zirconium
0.100.130	0.100.230	Mg	Magnesium	0.100.161	0.100.261	P	Phosphor
0.100.131	0.100.231	Mn	Manganese				



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Type:
AAS-32

Atomic Absorption Spectrophotometer (Flame type)

Safe
Simple
Sensitive
Low cost



This AAS -series is a single beam optical technology designed to utilize a high energy throughput for the best detection limits with more sensitivity, smaller size and competitive price. The Background correction was achieved by inserting the deuterium lamp directly after the hollow cathode lamp and using variable giant pulse.

The patented new technology rich oxygen air-acetylene flame analysis makes our AAS:

- High sensitivity,
- Simple and safe operation
- Low analytical cost

Features:

High cost-effective flame AAS

Reasonable design, adopting the same key parts as in high end instruments, ensures basic functions but less automation to provide an economic model for users

Reliable integration of main unit with microprocessor

Built-in microprocessor with necessary auto-control and data processing functions achieve high reliability of the instrument.

Simple and East Operation

Eye-catching digital display, multi-function data processing ability and fast function-key direct input realize easy and fast analysis.

Specifications:

Main Specification

Wavelength range	190-900 nm
Wavelength accuracy	±0.5nm
Resolution	Two spectral lines of Mn at 279.5nm and 279.8nm can be separated with the spectral bandwidth of 0.2nm and valley-peak energy ratio less than 30%.
Baseline stability	≤0.005A/30min
Background correction	The D2 lamp background correction capability at 1A is better than 30 times.

Light Source System

2 lamps are powered simultaneously (one preheating)	
Lamp current adjustment range:	0~20mA.
Lamp power supply mode	400Hz square wave pulse

Optical System

Monochromator	Single beam, Czerny-Turner design grating monochromator
Grating	1800 l/mm
Focal length	277mm
Blazed Wavelength	250nm
Spectral Bandwidth	0.1nm, 0.2nm, 0.4nm, 1.2nm, 4 steps.
Adjustment	Manual adjustment for wavelength and slit

Flame Atomizer

Burner	10cm single slot all-titanium burner
Spray chamber	Corrosion resistant all-plastic spray chamber.
Nebulizer	High efficiency glass nebulizer with metal sleeve, sucking up rate: 6-7ml/min
Position adjustment	Manual adjusting mechanism for vertical, horizontal positions and the rotation angle of the burner
Gas line protection	Fuel gas leakage alarm

Detection and Data Processing System

Detector	R928 Photomultiplier with high sensitivity and wide spectral range.
Electronic and micro-computer system	Automatic adjustment of light source power. Light energy and negative high-voltage auto-balance
Display mode	LED display of energy and measurement values, concentration direct reading
Read mode	Transient, time average, peak height, peak area. Integral time is selectable in the range of 0.1-19.9s.
Scale expansion	0.1~99
Data processing mode	Automatic calculation of mean, standard deviation and relative standard deviation. Repeating number is in the range of 1-99
Measurement mode	Automatic curve fitting with 3~7 standards; Sensitivity auto-correction
Result printing	Measurement data, working curve, signal profile and analytical conditions can all be printed out.
Instrument self-check	Check current status of each function key

Characteristic Concentration and Detection Limit

Normal Air-C ₂ H ₂ flame	Cu: Characteristic concentration≤0.025mg/L, Detection limit≤0.006mg/L;
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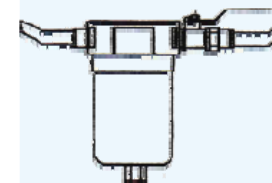
Function Expansion

Hydride vapor generator can be connected for hydride analysis	
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Dimensions and weight

Main unit (LxWxH)	1020 x 490 x 540 mm / Net weight : 80kg
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Accessories:



Order Information:

Oil-free air compressor

A high quality oil free air compressor suitable for laboratory application to connect to analytical systems such like AAS, GC etc. Equipped with moisture separation system . high efficiency and low noise.

Model	COMP-01
Rated discharge pressure:	0.3MPa
Discharge flow rate:	0.3~ 0.9 m3/h, adjustable
Noise:	< 55dB (A)
Dimensions:	400 x300 x620 mm
Power:	AC 220 V, 1 ph, 50/60 Hz

Type of tank and cooling water separation:
double tanks, two steps cooling water separation.

Gas – Water Separator

The gas-water separator to be installed between the air compressor and the AAS main unit (next to the gas control box) and used for gas-water separation.

Article no.	Type	Description
Main package:		
0.100.001	Type AAS-32	Atomic Absorption Spectrophotometer, flame type <ul style="list-style-type: none"> • Flame type • Microprocessor control, • LED display • D2 background correction
Required accessories for site preparation:		
0.100.020	Exh4	Hood and Vent Kit, Stainless Steel with flexible tube L= 4m
Accessories for electrical site preparation		
0.100.026	UPS-01	UPS (3 KV) Uninterruptable Power Supply
Accessoires for gas supply:		
0.100.031	REG/C ₂ H ₂	Acetylene Pressure Regulator
0.100.032	REG/air	Air Pressure Regulator
0.100.036	COMP-01	Air compressor, oil-free, 220V 50/60Hz
Report printer:		
0.100.051	PRINT-32	Dot Matrix Printer for direct report generation